

MVDR BASED FEATURE EXTRACTION FOR SPEECH RECOGNITION

ABSTRACT OF THE DISCLOSURE

There is provided a method for extracting feature vectors from a digitized utterance. Spectral envelope estimates are computed from overlapping frames in the digitized utterance based on a Minimum Variance Distortionless Response (MVDR) method. Cepstral feature vectors are generated from the spectral envelope estimates. There is provided a method for generating spectral envelope estimates from a digitized utterance. The spectral envelope estimates are generated from overlapping frames in the digitized utterance based on a harmonic mean of at least two low- to-high resolution spectrum estimates. There is provided a method for reducing variance of a feature stream in a pattern recognition system. The feature stream is temporally or spatially averaged to reduce the variance of the feature stream.